

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Lindsey Lake Tanker Truck Spill - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region X

Subject: POLREP #2
PROGRESS POLREP
Lindsey Lake Tanker Truck Spill

Hood River, OR
Latitude: 45.6873530 Longitude: -121.7129500

To: Calvin Terada, EPA Region 10 (POLREP List)
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From: Jeffrey Fowlow, On-Scene Coordinator

Date: 2/20/2019

Reporting Period: 2/16/2019 to 2/20/2019

1. Introduction

1.1 Background

Site Number:	Contract Number:
D.O. Number:	Action Memo Date:
Response Authority: OPA	Response Type: Emergency
Response Lead: EPA	Incident Category:
NPL Status:	Operable Unit:
Mobilization Date: 2/13/2019	Start Date: 2/11/2019
Demob Date:	Completion Date:
CERCLIS ID:	RCRIS ID:
ERNS No.:	State Notification: OERS 2019-0334
FPN#: E19003	Reimbursable Account #: 2019 HR 10NAXHR 000D91 ZOFF

1.1.1 Incident Category

Emergency Response

1.1.2 Site Description

The site lies along Interstate Highway I-84 in a wooded, rural area adjacent to the Columbia River in the Columbia River Scenic Gorge and Cascade Mountain Range. This section of the Interstate runs adjacent to Lindsey Lake and Lindsey Creek. Drainage from the interstate flows across an embankment into Lindsey Lake. I-84 is a critical, main east-west thoroughfare and main transportation route across northern Oregon. Union Pacific Railroad has a mainline track which crosses the northern edge of the site at Lindsey Lake, where the track and its supporting dirt-fill causeway acts as the Lake's northern confining boundary and a dividing line between the lake and the Columbia River. Two large culverts run through the railroad fill and under the track, allowing water flow/interchange and fish passage between lake and river. Finally, Lindsey Creek flows from upland areas underneath the Interstate and has formed a delta and wetlands in the lake.

1.1.2.1 Location

The site is located on Interstate Highway I-84, MP 54, and lies approximately 9 miles west of the town of Hood River.

1.1.2.2 Description of Threat

During a truck accident and trailer rollover, an estimated 4,400 gallons of diesel discharged from the tank truck's trailer and flowed onto the interstate's east and west bound lanes, and onto a steep, rocky embankment which drains into Lindsey Lake. Due to extreme weather and road conditions, snowplows continued to plow oily snow further east and west along the interstate, into Lindsey Creek, Lindsey Lake, and onto the embankment for days after the incident. Lindsey Lake is immediately adjacent, and hydraulically connected to the Columbia River through two large, open culverts. Lindsey Lake and Lindsey Creek act as a migratory pathway and spawning grounds for native salmon. The Columbia River is a navigable waterway in fact.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

At approximately 10:30 AM on 2/11/2018, a petroleum transport trailer overturned on Interstate 84 near Mile Post 54 (9 miles west of the town of Hood River, OR), reportedly due to winter weather and icy road conditions. The trailer was carrying winter grade diesel fuel and is estimated to have discharged 4,400 gallons of product to the roadway. The diesel then flowed across both lanes of the interstate, down a steep snow-covered embankment and into Lindsey Lake. Lindsey Lake is hydraulically connected to the

Columbia River, a known salmon spawning habitat, and currently partially frozen and covered with snow.

2.1.2 Response Actions to Date

Please see POLREP 1 for initial response activities.

The Oregon Department of Transportation (ODOT), Oregon State Police (OSP), and Cascade Fire Department initially responded to the incident. EPA mobilized On-Scene Coordinators and the EPA Superfund Technical Assessment and Response Team (START) contractors to the site to conduct air monitoring, site assessment, oversee response and removal operations, and join Unified Command.

Response Activities During this Operational Period

Saturday, February 16, 2019

Sheen and strong diesel odors continued to be observed on Lindsey Lake; however, neither sheen nor odors were observed in the Columbia River and/or Lindsey Creek. Water from Lindsey Lake was used to flush the snow/ice from the lake shore embankment where contamination is present. A 4-foot wide swath from the road to the lake was melted. Released diesel was captured on the shore line using absorbent pads and boom. The U.S. Army Corps of Engineers has temporarily raised the level of the water by about a foot on the stretch of the Columbia that includes our incident site, making maintenance of our 3000 feet of boom easier and providing some additional protection and relief for the critical spawning habitat at the mouth of Lindsey Creek. Scientists from the U.S. Fish and Wildlife Service and the National Marine Fisheries Service were on site and conducted an initial assessment by small boat to determine the impact of the spill and site operations on the nearby natural resources. Evidence of recent beaver activity, including a den, was observed in the part of Lindsey Lake impacted by the spill. A pair of American dipper were observed on Lindsey Creek.

Sunday, February 17, 2019

A hydrocarbon sheen was observed on Lindsey Lake as the snow and ice melts and fuel continued to migrate down the road embankment. Most of the sheen observed was confined to the primary containment area within the first boom. Sheen was not observed on the Columbia River. Flushing and collection operations continued from the embankment and highway shoulder. A 20'-wide swath of snow and ice was removed via flushing; an estimated total of 30 gallons of fuel have been recovered. Analytical results from water sampling results indicated that naphthalene (a component of winter blend diesel fuel) was detected in the waters of Lindsey Lake. Biologists led by U.S. Fish and Wildlife Service conducted a detailed survey and assessment of the Lindsey Lake and Lindsey Creek. One deceased bird in Lindsey Lake was observed but the team was unable to determine whether the bird's death resulted from the spill.

Monday, February 18, 2019

Flushing and recovery operations recovered an estimated 10 gallons of spilled diesel fuel using sorbents. A shallow interceptor trench was installed just above the shoreline of Lindsey Lake to collect, concentrate, and contain flushed oil/oily water. Sorbent material was placed in the trench to absorb oil from the flushing operation. A cultural resource monitor was on site during excavation activity. Diesel fuel and oily water were observed flowing from the south side of the highway across eastbound lanes of I-84. The outer lane was closed so that crews could safely absorb and remove the diesel melting out of the snowbanks that had been plowed against the Jersey barrier. Approximately 60 gallons of diesel fuel were recovered from this area using sorbent material and a vacuum truck, plus an additional 10 gallons of fuel (contained in 40 cubic yards of contaminated snow) was also hauled off site. An estimated total of 230 gallons of diesel fuel has been recovered. USFW recommended using an aeration device to mitigate potential dissolved phase contamination in Lindsey Lake. Strong odors and high concentrations of VOCs were detected along a public access trail. The Oregon Parks and Recreation Department has closed the trailhead near the site due to the potential human health impact.

Tuesday, February 19, 2019

A heating system (Thawzall) consisting of a series of several thousand linear feet of 0.75" hose circulating a glycol-based liquid heated to 180 degrees F was used to melt snow along the embankment leading to Lake Lindsey. The hose was placed directly on the snow and covered with insulating tarps to contain the heat and melt the snow. The runoff was then collected in the interceptor trench and absorbent media. Approximately 70% of the petroleum-contaminated snow and ice (containing an estimated 70 gallons of diesel) were removed from the eastbound lanes and shoulder of I-84. An estimated total of 400 and 1000 gallons of diesel has been recovered to date.

Wednesday, February 20, 2019

Removal of contaminated snow on the eastbound shoulder of I-84 continued. Use of the Thawzall to melt snow continued on the north embankment. Approximately 119 gallons of fuel was recovered from land-based operations. Sheen on Lake Lindsey was noted within the containment boom but not outside the boom nor in the Columbia River. Absorbents at the shoreline of Lindsey Lake captured approximately 350 gallons of fuel. One dead bird (cormorant) and one dead fish was recovered from Lindsey Lake and sent to USFW.

Thursday, February 21, 2019

Snow removal north and south of the incident site is nearly complete and excavation of petroleum-contaminated soil (PCS) has begun. ODOT engineers were consulted and provided guidance for safe soil removal that won't undermine the roadway. Confirmation soil sampling is ongoing concurrent with soil excavation. An estimated 159 gallons of fuel were recovered from absorbents in land-based (114 gallons) and water-based (45 gallons) operations.

Friday, February 22, 2019

Excavation of known PCS from the south side of I-84 was completed. Contaminated snow and shredded absorbents that were thrown by snow plowing high onto the steep walls and into tree branches along the south side of I-84 remain. A strong odor of diesel remains in these materials and crews are trying to determine how to safely remove the snow and shredded absorbents. Soil excavation along the northern embankment is ongoing and estimated to be approximately 40% complete. Diesel fuel has been observed weeping from road bed and absorbents are being used to contain the fuel. An estimated total of 204 gallons of fuel were recovered from land-based (152 gallons) and water-based (52 gallons) operations. Plans for the installation of monitoring wells on the north side of west-bound I-84 have been approved by ODOT. Drilling operations will begin depending on driller availability and weather. A Regional Response Officer from NOAA

was on site conducting SCAT assessment. His recommendations for shoreline cleanup are due to UC by Wednesday, February 27. On-site biologists have recovered another dead salmonid. Total recovered wildlife includes: 1 cormorant; 4 perch; 2 salmonid; 1 salamander; 1 unidentifiable bird carcass. All dead wildlife is being shipped to USFW. Due to limited landfill operating hours on Saturday, anticipated incoming heavy snowfall, and crew fatigue, the UC decided to stabilize the site and shut down operations Saturday afternoon in a planned, orderly fashion and remain shut down until at least Monday February 25.

Saturday, February 23, 2019

Excavation and removal of PCS from the north embankment continued. An estimated 56 gallons of fuel was recovered from land-based absorbent operations. Operations instituted a temporary shutdown plan to go from Saturday afternoon until at least Monday morning, but possibly longer depending on weather conditions. Road closure signage and equipment were removed to allow for snow plowing on I-84. All trucks and equipment were re-located to the Staging Area. Water sampling and absorbent maintenance will continue through the shutdown. A conference call will be conducted wherein UC will determine whether work will re-commence on Monday.

2.2 Planning Section

2.2.1 Anticipated Activities

N/A

2.2.1.1 Planned Response Activities

Continued boom maintenance and removal of diesel at shoreline. Continued air monitoring. Placement of additional boom in the lake, creek, and railroad culvert from the lake into the river. Excavation and disposal of PCS. Continued water sampling. Install monitoring wells to locate and extract product. Continued water sampling and wildlife recovery, if any.

2.2.1.2 Next Steps

A temporary shutdown is in effect due to predicted snowfall. ODOT will not allow lane closure on I-84 during a significant snowfall that requires plowing. Unified Command will conduct daily conference calls to determine when it is safe and permissible to return to work.

2.2.2 Issues

- Discharge of 4,400 gallons of winter grade diesel onto Interstate Highway 84, Lindsey Creek, and Lindsey Lake, which are immediately adjacent and connected to the Columbia River.
- Harsh winter weather conditions hampering response and removal efforts and creating safety issues due to traffic on I-84
- Presence of salmon and salmon spawning grounds in the lake and creek.
- Spreading of diesel-contaminated snow by snow plows much further east and west of the original accident site, impacting other areas such as Lindsey Creek.
- Diesel-contaminated snow on upland highway slopes to melt and remain a spill source.

2.3 Logistics Section

Command and Staging areas have been established at Viento State Park. A portion of a nearby I-84 weigh station has been made available for use as a forward staging area.

2.4 Finance Section

2.4.1 Narrative

- The PRP, Space Age Fuels, mobilized and are paying for response and removal efforts via two response contractors and an environmental consultant.
- On 2/11/2019, OSC Franklin opened the Oil Spill Liability Trust Fund (FPN# E19003) for an initial ceiling of \$20,000 for response, assessment, oversight, and removal activities.
- EPA issued an initial Task Order (TO) for \$12,000 to the EPA START contractor, Ecology & Environment, Inc., to respond to the site and conduct air monitoring, documentation, and on-scene monitoring for response activities.
- On 2/13, due to weather delays, an increased spill footprint, increased complexity of the spill response, and need to continue onsite activities, the OSC increased the ceiling FPN ceiling to \$50,000.
- On 2/16, the OSC increased the FPN ceiling to \$85,000.
- On 2/18, the OSC provided a Pollution Removal Funding Agreement to US Department of the Interior, Fish and Wildlife Service for \$11,700.
- On 2/18, the OSC increased the TO for START support to \$48,000.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
IAGs	\$11,700.00	\$11,700.00	\$0.00	0.00%

TAT/START	\$48,000.00	\$36,000.00	\$12,000.00	25.00%
Intramural Costs				
USEPA - Direct	\$15,000.00	\$8,000.00	\$7,000.00	46.67%
Total Site Costs	\$74,700.00	\$55,700.00	\$19,000.00	25.44%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Northwest Firefighters
EPA

2.5.2 Liaison Officer

Northwest Firefighters
ODOT

2.5.3 Information Officer

ODEQ

3. Participating Entities

3.1 Unified Command

EPA
ODEQ
Space Age Fuel

3.2 Cooperating Agencies

Oregon Department of Transportation
Columbia River Intertribal Fish Commission
NOAA National Marine Fisheries Service
U.S. Fish and Wildlife
U.S. Department of Interior
Oregon State Parks and Recreation Department

4. Personnel On Site

Approximately 50 personnel are on site or supporting site work (EU is offsite).

EPA
ODEQ
ODOT
CRITFC
EPA START Contractor (Ecology and Environment, Inc.)
HydroCon consultants
Northwest Firefighters
National Response Corporation Environmental Services
Oregon Parks and Recreation Department
K&E Excavation

5. Definition of Terms

No information available at this time.

6. Additional sources of information

6.1 Internet location of additional information/report

<https://response.epa.gov/spaceagel-84spill>

6.2 Reporting Schedule

7. Situational Reference Materials

No information available at this time.